# Supplement of Installation Guide (Windows)

Thank you for purchasing our product.

When using the EXPRESSBUILDER E8.10-004.01 (Firmware version: 3.20.154), see this supplement before installing Windows. Red lines indicate the changes of *Installation Guide* (*Windows*).

Please read the instructions carefully and keep this document for your future reference.

# About installation of LAN drivers (N8104-176/186)

When using N8104-176/186, see the following supplement to install LAN drivers.

LAN board	N8104-176/186 * Model T120h only supports N8104-186.
Cases	Assisted Installation by EXPRESSBUILDER Manual Installation by EXPRESSBUILDER
Locations	Installation Guide (Windows)- Windows Server 2016: 3.5.1 Installing the LAN drivers- Windows Server 2012 R2: 4.5.1 Installing the LAN drivers

Old	However, if N8104-176/186 is used, "Standard Program Package" has to be applied again
	for LAN driver installation.
	If the OS is setup by either "Assisted" or "Manual" option, "Standard Program Package"
	has to be applied twice to install the driver of N8104-176/186.
New	Install the Standard Program Package before using N8104-176/186.

# About EXPRESSBUILDER

The following description indicates the changes of Installation Guide (Windows).

Case	Assisted Installation by EXPRESSBUILDER
Locations	Installation Guide (Windows) "Assisted Installation"
	- Windows Server 2016 : 3.2.3 Installation procedure step 4
	- Windows Server 2012 R2 : 4.2.3 Installation procedure step 4

New \* <u>Underlines</u> indicate the changes of guide.

### 4. Choose Assisted Install of Install Method.

Note

Specify the following if necessary, and then click the ">" icon of the lower right of the screen.

icon after setting the media.

When choosing DVD-ROM Media or USB at Install Source, click ">"

	······ ·······························
NEC Express5800/R120h-2t	4 <b>@ # </b>
Operatir	ng System Installation
Installing a	new operating system to this server
Recommended Settings	•
Controller *	
PCI 5C:00 - HPE Smart Arr	y E208i-a SR Gen10 *
Disk *	
LUN 1 - 899G	•
Install Source *	,
Attended Terraria	
Skip Update	•
install Method:	
Assisted Install	· >

RAID Configuration

Choose Keep Current Setting after configuring a RAID array by SSA or System Utilities when using RAID controller.

Controller

Choose the controller of installation destination.

• Disk

Choose the disk of installation destination.

Install Source

Choose an OS installation source from the following types.

DVD-ROM Media	DVD-ROM	1	•
File on a USB drive	USB flash drive		
SMB/CIFS (Windows Share)	Network sharing folder		
An anonymous FTP server	This option is not available.		New
Install ClearOS from the Internet	This option is not available.		,

Each media supports the following file format.

Flat : a standard folder/file structure ISO : single ISO or UDF file

T

- Attempt Firmware Update
   Choose Skip Update. The other options are not available.
- Install Method
   Choose Assisted Install.

Case	Assisted Installation by EXPRESSBUILDER
Locations	Installation Guide (Windows) "Assisted Installation"- Windows Server 2016: 3.2.3 Installation procedurestep 6- Windows Server 2012 R2: 4.2.3 Installation procedurestep 6

**New** \* <u>Underlines</u> indicate the changes of guide.

6. On the following screen, specify settings for the OS installation. <u>Set your time zone.</u>

NEC	Express5800/R120h-2M	9 # F ?	i U
hoose OS			
1icrosoft Windows Server	2016 Standard x64 Edition		*
IS Language	OS Keyboard	Time Zone	
inglish (US)	English (US)	(GMT-12:00) International Date Line West	·
Computer Name			
srvba8b3f324	Organization Name	e Owner Name	
	12 / 32	0 / 32	0 / 32
Optional - mixed case v	vith numbers and punctuation, +8 letters	Confirm Password	
		0 / 32	
Install the HyperV r	ole on this system		
Enable Windows Fi	rewall		
<b>(</b>			>



- 1. Turn on peripherals (such as a display), and then turn on the server. Insert OS installation media into the drive.
- 2. To run EXPRESSBUILDER, press <F11> key during POST.

On the [One-Time Boot Menu], select the optical disk drive in which the OS installation media was inserted.

The system starts from the OS installation media.
 The message "Press any key to boot from CD or DVD…" is displayed on the upper of the screen.

Press the <Enter> key to start from the media.

The boot sequence proceeds and the message "Windows is Loading files…" appears.

Note

If the Windows Setup screen (the screen in the next step) does not display, the <Enter> key was not properly pressed. Turn the system power on again, and then start again.

4. Click Next.



#### 5. Click Install now.

🖆 Windows Setup		
	Windows Server 2016	
	Install now	
Benair your computer		
© 2016 Microsoft Corporation. All rights re	served.	

If the following message is displayed: Go to Step 6.

If the following message is not displayed: Go to Step 8.

Loading the driver			
The necessary media drived drivers include DVD, USB.	er for the PC in use , and hard disk driv	could not be fo ers. If vou have	und. Types of media a CD, DVD, or USB flash
drive with the driver store	d, please insert it.	,	
Note: If the Windows inst can be removed for this st	allation media is sto tep.	ored in the DVD	drive or the USB drive, it
[	Browse (B)	ОК	Cancel

6. After connecting the removable media where the onboard RAID controller driver was copied, specify the path and click **OK**.

<Removable media> : **¥sw\_raid1\_driver** 

- Select the following driver from the displayed list of drivers, and click Next.
   HPE Smart Array S100i SR Gen10 SW RAID
- 8. Type the product key, and then click **Next.**

Activate Windows	
If this is the first time you're install you need to enter a valid Windows email you received after buying a o Windows came in.	ng Windows on this PC (or you're installing a different edition), product key, Your product key should be in the confirmation figital copy of Windows or on a label inside the box that
The product key looks like this: XX If you're reinstalling Windows, sele automatically activated later.	001-30001-300001-300001-300001 ct I don't have a product key. Your copy of Windows will be
Π	
Privacy statement	I don't have a product key

If you are using Backup DVD-ROM, this screen does not appear.

9. Choose an operating system you want to install and click **Next**.

Operating system	Architecture	Date modified
Windows Server 2016 Standard Windows Server 2016 Standard (Desktop Experience) Windows Server 2016 Datacenter Windows Server 2016 Datacenter (Desktop Experience)	ಸ್ಟೆ4 ಸರೆ4 ಸರೆ4 ಸರೆ4	9/16/2016 9/16/2016 9/16/2016 9/16/2016
Description: This option (ecommended) induces management and set to run most snow rules and applications. It does not inclu- sorver locally remotely with Windows PowerShell or eth- Server Installation Options. <sup>4</sup>	vicing by installing o de a GUI, but you can er tools. For more def	nly what is needed fully manage the ails see "Windows
		N

Options are displayed depending on the installation media you are using.

Tips	Read the message of the screen, and then choose an installation option.
	Windows Server 2016 Standard or Windows Server 2016 Datacenter
	$\rightarrow$ Described as "Server Core" by this manual
	Windows Server 2016 Standard (Desktop Experience) or Windows
	Server 2016 Datacenter (Desktop Experience)
	ightarrow Described as "Desktop Experience" by this manual

10. Read the license terms carefully.

If you agree, check **I accept the license terms** and click **Next**.



11. Select Custom: Install Windows only (advanced).

Upgrade: Install Windo The files, settings, and app available when a supporte	ws and keep files, settings, and applications lications are moved to Windows with this option. This option I version of Windows is already running on the computer.	1 is only
Custom: Install Windo The files, settings, and app make changes to partition recommend backing up ye	vs only (advanced) ications aren't moved to Windows with this option. If you w and drives, start the compute using the installation disc. W or files before you continue.	ant to
Help me decide		

12. The "Select Windows installation location" screen is displayed.

If the driver was loaded in steps 6 and 7, or if the RAID controller is not in use, proceed to step 15. If you select **Load driver** here, the following screen will be displayed.

Loading the driver
To install the device driver of the drive, insert the installation media that contains the driver file and click <b>OK</b> . Note: The installation media is a CD, DVD, or USB flash drive.
Browse (B) OK Cancel

- 13. After setting the Starter Pack DVD in the UBS-DVD drive, assign a file directory, and click **OK**.
  - onboard RAID Controller
    - Express5800/R120h-1M, R120h-2M

<Starter Pack DVD>:¥software¥001¥drivers¥sw\_raid1\_driver

Express5800/R120h-1E, R120h-2E, T120h

- <Starter Pack DVD>:¥software¥002¥drivers¥sw\_raid1\_driver
- RAID Controller (N8103-189/190/191/192/193/194/195/201)
   Express5800/R120h-1M, R120h-2M

<Starter Pack DVD>:¥software¥001¥drivers¥dac1\_driver

Express5800/R120h-1E, R120h-2E, T120h

<Starter Pack DVD>:¥software¥002¥drivers¥dac1\_driver

- 14. Select the following driver from the displayed list of drivers, and click **Next**.
  - onboard RAID Controller
     HPE Smart Array S100i SR Gen10 SW RAID
  - RAID Controller (N8103-189/192)
    - HPE Smart Array E208i-a SR Gen10
  - RAID Controller (N8103-190/193)
     HPE Smart Array P408i-a SR Gen10
  - RAID Controller (N8103-191/194)
     HPE Smart Array P816i-a SR Gen10
  - RAID Controller (N8103-195)
     HPE Smart Array E208i-p SR Gen10
  - RAID Controller (N8103-201)
     HPE Smart Array P408i-p SR Gen10

Tips

15. Click New.

et 2 Unellecated Space 64.0 MB 64.0 MB e 2 Particin 1: VID 51.0 MB 416.0 MB Primary e 3 Particin 1: VID 51.0 MB 56.0 MB Recovery e 3 Unalocated Space 279.1 GB 279.1 GB e 3 Unalocated Space 279.1 GB 279.1 GB e 3 Unalocated Space 279.1 GB 279.1 GB e 3 Unalocated Space 279.1 GB 279.1 GB	N	Name		Total size	Free space	Туре
er 2 Dealected Space 2791 GB 2991 GB ref Dealected Space 2791 GB 2991 GB ref Dealected Space Provide		Drive 1 Unall Drive 2 Partit	ocated Space ion 1: VID	64.0 MB 511.0 MB	64.0 MB 416.0 MB	Primary
er Statend	30	Drive 3 Unall	ocated Space	2791 GB	279.1 G8	neuvity
	€a Befresi €a Load d	sh driver	X Delete	<b>P</b> Eormat	🌞 Ngw	

If New is not displayed on the screen, click Drive options (advanced).

Specify the partition size in the text box, and the click **Apply**.
 If the partition is already created, proceed to step 18.

Name     Tetal size     Free space     Type       Image: Drive I Unallocated Space     64.0 MB     64.0 MB     64.0 MB     Free space     79.0 MB     70.0 MB	Where do you wa	nt to install Wir	ndows?		
Prive 1 Unablecated Space     64.0 MB     64.0 MB     64.0 MB     70 mic 2 Partition 1: VD     51.0 MB     416.0 MB     Finary     70 mic 3 Partition 1: Recovery     70 mic 3 Partition 1: Recovery     70 mic 3 David Space     70 mic 3 David Space     70 mic 3 David Space     70 mic 4 Mathematicated     70 mic 4 Mathmaticated     70 mic 4 Mathmaticated     70	Name		Total size	Free space	Туре
Dire 2 Partice 1: VD     SILD MB     416.0 MB     Primary     Dire 3 Danison 1: Recovery     200.0 MB     40.0 MB     Recovery     Dire 3 Danison 1: Recovery     201.0 MB     40.0 MB     Recovery     Dire 3 Danison 1: Recovery     201.0 MB     40.0 MB     Recovery     201.0 MB     40.0 MB     Recovery     201.0 MB     Recovery     Recov	Drive 1 Unallo	cated Space	64.0 MB	64.0 MB	
Drive 3 Pertition 1: Recovery     200.0 MB     56.0 MB     Recovery     201.0 2791.0     2791.	Drive 2 Partiti	on 1: VID	511.0 MB	416.0 MB	Primary
Dive 3 Unafficated Space 279 1 08 279 1 08 279 1 08      Point     Poin	Drive 3 Partiti	on 1: Recovery	300.0 MB	56.0 MB	Recovery
4g Edirezh ∑Dulete @Format ¥ Hge @ Load driver ⊋ Egtond See: [\$5501 ⊥ M8 Agely Cencel ]jest	Drive 3 Unalle	cated Space	279.1 GB	279.1 GB	
4 Baleah ∑Delete @format ¥ New @ Load driver ∰ Egtend Size: [955001 → M8 Agely Cencel [det.]					
(e) Load driver	Refresh	Relete	Format	+ Ngw	
Bea	🚯 Load driver	Extend	Size: \$85801	÷ MB ↓	Apply Can
Bet					
Net					
					Nex

When the following window appears, click OK.

indows	Setup	
0	To ensure that all Windows feat additional partitions for system	tures work correctly, Windows might create files.
		OK Cancel

When creating a partition, the OS creates the following partitions at top of the
hard disk drive.
- Recovery Partition
- EFI System Partition (ESP)
- Microsoft Reserved Partition (MSR)

17. Select the partition created in step 16, and then **Format**.

Important	When the following screen appears, read the message and click [OK]. Carefully select the partition to be formatted because data in the partition will be erased.
	Windows Setup
	This partition might contain important files or applications from your     computer manufacturer. If you format this partition, any data stored on it will     be lost.
	OK Cancel
1	

18. Select the created partition, and then click **Next**.

😨 🗳 Windows Setup Where do you want to install Win	dows?			
Name Drive 3 Partition 1: Recovery Drive 3 Partition 2: Recovery Drive 3 Partition 2: Recovery Drive 3 Partition 3 Drive 3 Partition 3 Drive 3 Partition 4	Total doa         Free space         Type           300.0 MB         \$60.0 MB         Recovery           450.0 MB         433.0 MB         Recovery           100.0 MB         \$90.0 MB         system           100.0 MB         160.0 MB         \$160.0 MB			
4 Bittanh X Dates G Tond Group S Const	262.00 283.00 mmmy			
2 Installing Windows				
Tips	The number of pacture configuration.	artitions displayed diffe	rs depending on the	hardw

When the following message appears, Windows installation starts automatically.



The server will automatically restart after Windows Server 2016 is installed. You will proceed to Windows setup after restart. 19. Set user settings according to operating system chosen in step 9.



Press <Ctrl>+<Alt>+<Delete> to unlock.



Type the password and press <Enter>.





- 21. Install drivers and specify detailed settings according to Chapter 1 (3.5 Setup of Device Drivers).
- 22. Confirm if Windows is activated according to Chapter 1 (3.6 License Authentication).
- 23. See Chapter 1 (3.7 Setup of Windows Server 2016 NIC Teaming (LBFO)) to setup a team as needed.
- 24. Install the applications as needed according to Chapter 1 (3.8 Installing the Applications).
- 25. Referring to Chapter 1 (3.9 Disabling a virtual install disk), set up depending on your needs.

- 26. Set the other OS settings according to Chapter 1 (5. Setting up for Maintenance).
- 27. From time settings, check whether the current time and time zone have been set correctly. Correct settings as needed. Also, from RBSU Date and Time, check whether the Time Format has been set to Local Time and Time Zone to Unspecified Time Zone.
  If the Time Zone is incorrect, see *5.6 Operation Troubleshooting* under *Chapter 1 (5. Troubleshooting)* in *Maintenance Guide* and set to the correct value.

The Windows installation with Manual option is now complete.

## New \*Windows Server 2012 R2

## 4.4.3 Installation procedure

Note

Read the precautions in *Chapter 1* (4.1 Precautions of Windows Server 2012 R2 Installation) in advance.

- 1. Turn on peripherals (such as a display), and then turn on the server. Insert OS installation media into the drive.
- 2. To run EXPRESSBUILDER, press <F11> key during POST.

On the [One-Time Boot Menu], select the optical disk drive in which the OS installation media was inserted.

3. The system starts from the OS installation media.

The message "Press any key to boot from CD or DVD..." is displayed on the upper of the screen.

Press the <Enter> key to start from the media.

The boot sequence proceeds and the message "Windows is Loading files..." appears.



4. Click Next.



## 5. Click **Install now**.

If the following message is displayed: Go to Step 6.

If the following message is not displayed: Go to Step 8.

Loading the driver
The necessary media driver for the PC in use could not be found. Types of media
drive with the driver stored, please insert it.
Note: If the Windows installation media is stored in the DVD drive or the USB drive, it can be removed for this step.
Browse (B) OK Cancel

6. After connecting the removable media where the onboard RAID controller driver was copied, specify the path and click **OK**.

<Removable media> : **¥sw\_raid1\_driver** 

7. Select the following driver from the displayed list of drivers, and click **Next**.

## HPE Smart Array A100i SR Gen10 SW RAID

8. Type the product key, and then click **Next.** 

	🕞 🔬 Windows Setup	
	Enter the product key to activate Windows	
	It should be on the back of the box that Windows came in or in a message that shows you bought Windows.	
	The product key looks like this: XXXXX-XXXXX-XXXXXXXXXXXXXXXXXXXXXXXXX	
	Dashes will be added automatically.	
	Privacy statement Next	
Collecting information	2 Installing Windows	

Tips

If you are using Backup DVD-ROM, this screen does not appear.

9. Choose an operating system you want to install and click **Next**.

) 🔏 Windows Setup			
Select the operating system you want to install			
Operating system Windows Server 2012 Standard (Server Core Installation) Windows Server 2012 Standard (Server with a GUI)	Architecture x64	Date modified 7/26/2012 7/26/2012	
Description: This option is useful when a GUI is required—for example, to application that cannot be run on a Server Core installation. A policitation to u can writch to a different installation option to Options.	provide backward JI server roles and ter. See "Windows	compatibility for an leatures are Server installation	
		Ned	

Options are displayed depending on the installation media you are using.

10. Read the license terms carefully.

If you agree, check I accept the license terms and click Next.



11. Select Custom: Install Windows only (advanced).

_		
	🦉 Windows Setup	
	Which type of installation do you want?	
	Upgrade: Install Windows and keep files, settings, and applications The files, settings, and applications are moved to Windows with this option. This option is only available when a supported version of Windows is already running on the computer.	
	Custom: Initial Windows only (advanced) The files, settings and applications aren't moved to Workews with this option. If you want to make change to particles and driver, that the computer using the initialization doc. We recommend backing up your files before you continue.	
	Help me decide	
1 Collecting information 2	Installing Windows	

12. Select Custom: Install Windows only (advanced).

If the driver was loaded in steps 6 and 7, or if the RAID controller is not in use, proceed to step 15. If you select Load driver here, the following screen will be displayed.



- - onboard RAID Controller

Express5800/R120h-1M, R120h-2M

<Starter Pack DVD>:¥software¥001¥drivers¥sw\_raid1\_driver

Express5800/R120h-1E, R120h-2E, T120h

<Starter Pack DVD>:¥software¥002¥drivers¥sw\_raid1\_driver

<ul> <li>RAID Controller (N8103-189/190/191/192/193/194/195/201)</li> </ul>
Express5800/R120h-1M, R120h-2M
<starter dvd="" pack="">:¥software¥001¥drivers¥dac1_driver</starter>
Express5800/R120h-1E, R120h-2E, T120h
<starter dvd="" pack="">:¥software¥002¥drivers¥dac1_driver</starter>
14. Select the following driver from the displayed list of drivers, and click <b>Next</b> .
onboard RAID Controller
HPE Smart Array S100i SR Gen10 SW RAID
RAID Controller (N8103-189/192)
HPE Smart Array E208i-a SR Gen10
RAID Controller (N8103-190/193)
HPE Smart Array P408i-a SR Gen10

- RAID Controller (N8103-191/194)
  - HPE Smart Array P816i-a SR Gen10
- RAID Controller (N8103-195)
   HPE Smart Array E208i-p SR Gen10
- RAID Controller (N8103-201)
   HPE Smart Array P408i-p SR Gen10
- 15. Click New.

	Name	ocated Source	Total size	Free space	Туре
8 B	Drive 2 Partiti	ion 1: VID	511.0 MB	465.0 MB	Primary
-	Drive 3 Unalle	ocated Space	279.4 GB	279.4 GB	
fa Befrei 🔁 Load	sh driver	Relete	Correct	🐥 Ngw	

16. Specify the partition size in the text box, and the click **Apply**.

Name		Total size	Free space Type	
⇒ Drive 2 P	artition 1: VID	511.0 MB	465.0 MB Primary	
Orive 3 L	nallocated Space	279.4 GB	279.4 GB	
€ <u>⊅ R</u> efresh	Delete	Eormat	+ Ngw	
🚯 Load driver	Egtend	Size: 286102	MB Apply	Cancel
				Next

Vindows Setup	×
To ensure that all Windows feat additional partitions for system	ures work correctly, Windows might create files.
	OK Cancel
Tips	When creating a partition, the OS creates the following partitions at top of the
	hard disk drive.
	- Recovery Partition
	<ul> <li>Recovery Partition</li> <li>EFI System Partition (ESP)</li> </ul>

- 17. Select the partition created in step 16, and then **Format**.
- 18. Select the created partition, and then click **Next**.

Where do you want to install Win	ndows?		
Name	Total size	Free space Type	~
Drive 2 Partition 1: VID	511.0 MB	465.0 MB Primary	
Drive 3 Partition 1: Recovery	300.0 MB	285.0 MB Recovery	
Drive 3 Partition 2	100.0 MB	95.0 MB System	
Drive 3 Partition 3	128.0 MB	128.0 MB MSR (Reserved)	
Drive 3 Partition 4	278.9 GB	278.9 GB Primary	
fe Befresh X Delete € Load driver Delete	Sormat	-iji Ngw	
		Ne	4

If the four partition types Recovery, System, MSR (Reserved), and Primary have not been created in the created partition, it means that you failed to create the partition. Delete the partition you attempted to create, and then create a new partition. If you have connected a data disk to a partition, be careful not to delete that partition.

Tips

The number of partitions displayed differs depending on the hardware configuration.

When the following message appears, Windows installation starts automatically.



The server will automatically restart after Windows Server 2012 R2 is installed. You will proceed to Windows setup after restart.

19. Set user settings according to operating system chosen in Step 9.

Ser	ver wi	th a GUI					
	Type a	a password	l and click I	Finish.			
		Setting Type a password for th User name Password Reenter password	S e built-in administrator acco Administrator	bunt that you can use to	sign in to this computer.		
	Ģ					Finish	
	Press ·	<ctrl>+&lt;</ctrl>	Alt>+ <del< th=""><th>ete&gt; to si</th><th>gn-in.</th><th></th><th>_</th></del<>	ete> to si	gn-in.		_
	Pre	oss Ctrl+Alt+Delete	to sign in.				
	1	12:3	34_				

Friday, November 29

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- 20. See Chapter 1 (4.4 Standard Program Package Installation) to install SPP.
- 21. Install drivers and specify detailed settings according to Chapter 1 (4.5 Setup of Device Drivers).
- 22. Confirm if Windows is activated according to Chapter 1 (4.6 License Authentication).
- 23. See Chapter 1 (4.7 Setup of Windows Server 2012 R2 NIC teaming (LBFO)) to setup a team as needed.
- 24. Install the applications as needed according to Chapter 1 (4.8 Installing the Applications).
- 25. Referring to Chapter 1 (4.9 Disabling a virtual install disk), set up depending on your needs.
- 26. Set the other OS settings according to Chapter 1 (5. Setting up for Maintenance).
- 27. From time settings, check whether the current time and time zone have been set correctly. Correct settings as needed. Also, from RBSU Date and Time, Check whether the Time Format has been set to Local Tim and Time Zone to Unspecified Time Zone.

If the Time Zone is incorrect, see 5.6 Operation Troubleshooting under Chapter 1 (5. Troubleshooting) in Maintenance Guide and set to the correct value.

The Windows installation with Manual option is now complete.